

ABSTRACT

1
2 A collimating image-forming apparatus comprising a first linear polarizer is
3 disclosed. A first quarter-wave plate is disposed adjacent the first polarizer and has
4 its fast and slow axes at substantially 45° to the plane of polarization of the first
5 polarizer. The apparatus further comprises a beam-splitting curved mirror having a
6 convex surface adjacent the first polarizer and facing towards the first quarter-wave
7 plate, a second quarter-wave plate adjacent the concave side of the curved mirror,
8 the second quarter-wave plate having its fast and slow axes oriented with
9 respect to the corresponding axes of the first quarter-wave plate at angles
10 substantially equal to a first integral multiple of 90° , and a reflective-transmissive
11 polarizing member adjacent the second quarter-wave plate. A second linear
12 polarizer is adjacent the reflective-transmissive polarizing member, the second
13 linear polarizer having its plane of polarization oriented with respect to the plane of
14 polarization of the first linear polarizer at an angle substantially equal to a second
15 integral multiple of 90° , both of the multiples being even or both being odd.